Serial No. 10/659,707 Amendment dated February 6, 2006 Reply to Office Action of October 6, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

(Currently Amended) A driving apparatus for a plasma display panel, comprising:

 a scan driver for applying a first sustaining pulse to a scan electrode during a

 sustain period;

a sustain driver for applying a second sustaining pulse alternating with said first sustaining pulse to a common sustain electrode during said sustain period;

a sustain voltage source for supplying a driving voltage to the scan driver and the sustain driver such that the first and second sustaining pulses can be applied; and

control means for controlling a voltage value of said driving voltage in correspondence with a driving temperature at which the panel is driven;

a temperature sensor for generating a bit control signal corresponding to said driving temperature at which the panel is driven; and

Serial No. 10/659,707 Amendment dated February 6, 2006 Reply to Office Action of October 6, 2006

a switch controller for controlling an application of one of a plurality of voltage levels in response to said bit control signal, each of the voltage level being different from one another.

2. (Currently Amended) The driving apparatus as claimed in claim 1, wherein said sustain voltage source includes:

at least two driving voltage sources, corresponding to the plurality of voltage levels, for supplying said driving voltage; and

a plurality of switching devices provided among the driving voltage source, the scan driver and the sustain driver, the switch controller turning on any one of the switching devices in response to the bit control signal.

3. (Currently Amended) The driving apparatus as claimed in claim 21, wherein said control means includes:

a temperature sensor for generating a bit control signal corresponding to said driving temperature at which the panel is driven; and

a switch controller for turning on any one of said switching devices in response to said bit control signal a voltage level during an initialization period is greater than at least one of a voltage level of the first sustaining pulse or a voltage level of the second sustaining pulse.

- 4. (Currently Amended) The driving apparatus as claimed in claim 3 2, wherein said temperature sensor divides a high temperature into a plurality of temperature levels, and generates said bit control signal differentiated for each temperature level.
- 5. (Currently Amended) The driving apparatus as claimed in claim 4, wherein said switch controller controls said switching devices such that said first and second sustaining pulses having a lower voltage value as a temperature of the panel is more raised can be is applied in response to said bit control signal as a temperature of the panel rises.
- 6. (Currently Amended) A driving apparatus for a plasma display panel, comprising: a scan driver for applying a scanning pulse and a first sustaining pulse to a scan electrode;
- a sustain driver for applying a second sustaining pulse alternating with said first sustaining pulse to a common sustain electrode;
- a temperature senor for sensing a peripheral temperature at which the panel is driven;
- a sustain voltage source for supplying a driving voltage to the scan driver and the sustain driver such that the first and second sustaining pulses can be applied; and

a timing controller for controlling the scan driver and the sustain driver in correspondence with said peripheral temperature sensed by the temperature sensor, wherein the temperature sensor includes a first temperature sensor for sensing a high driving temperature and said first temperature sensor divides a high temperature into a plurality of temperature levels, and generates a bit control signal differentiated for each temperature level.

- 7. (Currently Amended) The driving apparatus as claimed in claim 6, wherein said temperature sensor <u>further</u> includes:
 - a first temperature sensor for sensing a high driving temperature; and a second temperature sensor for sensing a low driving temperature.
- 8. (Original) The driving apparatus as claimed in claim 7, wherein said high temperature is 40°C to 90°C while said low temperature is 20°C to -20°C.
- 9. (Currently Amended) The driving apparatus as claimed in claim 7, wherein said timing controller controls the scan driver and the sustain driver such that first and second sustaining pulses each having a first period can be applied when the panel is driven at said high temperature, whereas it controls the scan driver and the sustain driver such that first and second

Docket No. YHK-0116

sustaining pulses each having a second period different from said first period can be applied at

the other case temperatures other than said high temperature.

10. (Original) The driving apparatus as claimed in claim 9, wherein said first period is

wider than said second period.

(Currently Amended) The driving apparatus as claimed in claim 76, wherein said 11.

first temperature sensor divides a high temperature into a plurality of temperature levels, and

generates said bit control signal differentiated for each temperature level a voltage level during an

initialization period is greater than at least one of a voltage level of the first sustaining pulse or a

voltage level of the second sustaining pulse.

(Currently Amended) The driving apparatus as claimed in claim 41_7, wherein 12.

said timing controller controls the scan driver and the sustain driver such that said first and

second sustaining pulses each having a wider period as said temperature level is more raised can

be applied.

15

Docket No. YHK-0116

Serial No. 10/659,707 Amendment dated <u>February 6, 2006</u> Reply to Office Action of <u>October 6, 2006</u>

- 13. (Original) The driving apparatus as claimed in claim 12, wherein periods of said first and second sustaining pulses are set widely as a high interval and a low interval of said first and second sustaining pulses are widened equally.
- 14. (Original) The driving apparatus as claimed in claim 12, wherein periods of said first and second sustaining pulses are set widely as low intervals of said first and second sustaining pulse are kept constantly while high intervals of said first and second sustaining pulses are widened.
- 15. (Original) The driving apparatus as claimed in claim 12, wherein periods of said first and second sustaining pulses are set widely as high intervals of said first and second sustaining pulse are kept constantly while low intervals of said first and second sustaining pulses are widened.
- 16. (Currently Amended) The driving apparatus as claimed in claim 7, wherein said timing controller controls the scan driver such that said scanning pulse having a first width can be applied when the panel is driven at said low temperature while said scanning pulse having a second width different from said first width can be applied at the other case temperatures other than said low temperature.

Serial No. 10/659,707 Amendment dated <u>February 6, 2006</u> Reply to Office Action of <u>October 6, 2006</u>

- 17. (Original) The driving apparatus as claimed in claim 16, wherein said first width is wider than said second width.
- 18. (Original) The driving apparatus as claimed in claim 7, wherein said second temperature sensor divides said low temperature into a plurality of temperature levels, and generates said bit control signal differentiated for each temperature level.
- 19. (Original) The driving apparatus as claimed in claim 18, wherein said timing controller controls the scan driver such that said scanning pulse having a larger width as said temperature level is more lowered can be applied.
- 20. (Original) The driving apparatus as claimed in claim 19, wherein a width of said scanning pulse is set to 0.5μs to 5μs.
- 21. (Original) The driving apparatus as claimed in claim 19, further comprising:

 a data driver for applying a data pulse corresponding to the width of said scanning pulse under control of the timing controller.

Serial No. 10/659,707 Amendment dated <u>February 6, 2006</u> Reply to Office Action of <u>October 6, 2006</u>

22. (Currently Amended) A method of driving a plasma display panel, comprising the steps of:

applying a sustaining pulse having a first period of at least one of a high state or a low state when the panel is driven at the normal temperature; and

applying a sustaining pulse having a second period of at least one of a high state or a low state different from said first period when the panel is driven at a temperature higher than the normal temperature;

dividing said high temperature into a plurality of temperature levels; and setting said second period in accordance with said temperature level.

- 23. (Original) The method as claimed in claim 22, wherein said second period is wider than said first period.
 - 24. (Canceled).
- 25. (Currently Amended) The method as claimed in claim 24 22, wherein said second period is more widened as said temperature level is more raised increases.

26. (Currently Amended) The method as claimed in claim 22, further comprising the step of A method of driving a plasma display panel, comprising:

applying a sustaining pulse having a first period of at least one of a high state or a low state when the panel is driven at the normal temperature;

applying a sustaining pulse having a second period of at least one of a high state or a low state different from said first period when the panel is driven at a temperature higher than the normal temperature; and

setting a voltage value of a sustaining pulse applied when the panel is driven at the normal temperature to be different from that of a sustaining pulse applied when the panel is driven at a temperature higher than the normal temperature.

- 27. (Original) The method as claimed in claim 26, wherein the voltage value of said sustaining voltage applied when the panel is driven at the high temperature is set to be lower than that of said sustaining pulse applied when the panel is driven at the normal temperature.
- 28. (Currently Amended) The method as claimed in claim 26, further comprising the steps of:

dividing said high temperature into a plurality of temperature levels; and

Serial No. 10/659,707 Amendment dated February 6, 2006 Reply to Office Action of October 6, 2006

setting the voltage value of said sustaining pulse in correspondence with said temperature level.

- 29. (Original) The method as claimed in claim 28, wherein the voltage value of said sustaining pulse is more lowered as said temperature level is more raised.
- 30. (Currently Amended) A method of driving a plasma display panel, comprising the steps of:

applying a scanning pulse having a first width when the panel is driven at the normal temperature; and

applying a scanning pulse having a second width different from said first width when the panel is driven at a temperature lower than the normal temperature;

dividing said low temperature into a plurality of temperature levels; and

setting the second width of said scanning pulse in accordance with said temperature level.

31. (Original) The method as claimed in claim 30, wherein said second width is larger than said first width.

Docket No. YHK-0116

Serial No. 10/659,707 Amendment dated <u>February 6, 2006</u> Reply to Office Action of <u>October 6, 2006</u>

33. (Currently Amended) The method as claimed in claim 32 30, wherein said second width is more enlarged as said temperature level is more lowered.